Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

PORTLAND™

3 IN 1 ELECTRIC BLOWER VACUUM MULCHER

ITEM 62337

Visit our website at: http://www.harborfreight.com

REV 14k **Email our technical support at: productsupport@harborfreight.com**

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠WARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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SPECIFICATIONS

12 AMP ELECTRIC BLOWER/MULCHER

Motor	120V, AC only, 60Hz, 12.0 Amps
Air velocity	Two Speeds: 230/150 MPH
Air volume	375 CFM
Mulch ratio	12:1
Collection bag capacity	1.2 Bushel

US
218549

IMPORTANT SAFETY INSTRUCTIONS

READ AND UNDERSTAND ALL INSTRUCTIONS.
Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

READ THESE INSTRUCTIONS BEFORE USING THE BLOWER

- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not expose to rain; store indoors.
- Do not handle plug or tool with wet hands.
- Use outdoor extension cords marked W-A, W, SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJTW-A, or SJTOW-A. These cords are rated for outdoor use and reduce the risk of electric shock.
- Never allow children to operate the equipment. Never allow adults to operate the equipment without proper instruction.
- Keep all bystanders, children, and pets at least 50 ft. away.
- Always wear safety glasses with side shields marked to comply with ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are NOT safety glasses. Following this rule will reduce the risk of eye injury. Use face mask if operation is dusty.
- Wear eye protection which is marked to comply with ANSI Z87.1 when operating this product.
- Use extra care when cleaning on stairs.
- Do not leave appliance plugged in. Unplug from outlet when not in use and before servicing.
- Use only as described in this manual. Use only manufacturer's recommended attachments.
- Use only identical manufacturer's replacement parts and accessories. Use of any other parts may create a hazard or cause product damage.
- Keep hair, loose clothing, fingers and all body parts away from openings and moving parts.
- Secure long hair so it is above shoulder level to prevent entanglement in any moving parts.
- Wear heavy long pants, boots, and gloves. Avoid loose garments or jewelry that could get caught in moving parts of the machine or its motor.
- Do not operate the equipment while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces.

IMPORTANT SAFETY INSTRUCTIONS

- Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- Keep firm footing and balance. Do not overreach. Overreaching can result in loss of balance.
- Turn off all controls before unplugging.
- Avoid accidental starting. Be sure the power switch is not on before plugging in. Turn off power switch before unplugging.
- Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Do not use with damaged plug. If tool is not working as it should or has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.
- Do not operate this unit when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- Do not operate in poor lighting.
- Keep all parts of your body away from any moving parts and all hot surfaces of the unit.
- Do not put any object into openings. Do not use with any opening blocked; keep openings free of dust, lint, hair, and anything that may reduce air flow.
- Check the work area before each use. Remove all objects such as rocks, broken glass, nails, wire, or string which can be thrown or become entangled in the machine.
- Do not pull or carry by cord, do not use cord as a handle, close a door on a cord, or do not pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- If the power supply cord is damaged, it must be replaced only by the manufacturer or by an authorized service center to avoid risk.
- Service on the product must be performed by qualified repair personnel only. Service or maintenance performed by unqualified personnel could result in injury to the user or damage to the product.
- In a double insulated appliance, two systems of insulation are provided instead of grounding. No grounding means is provided on a double insulated appliance, nor should a means for grounding be added to the appliance. Servicing a double insulated appliance requires extreme care and knowledge of the system and should be done only by qualified service personnel. Replacement parts for a double insulated appliance must be identical to the parts they replace.
- Not intended for commercial use.

SPECIFIC SAFETY RULES FOR BLOWER

- Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. A wire gauge size (A.W.G.) of at least 14 is recommended for an extension cord 50 feet or less in length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.
- Do not point the blower nozzle in the direction of people or pets.
- Never run the unit without the proper equipment attached. Always ensure the blower tubes are installed.
- When not in use, blower should be stored indoors in a dry, locked up place—out of the reach of children.
- Maintain tool with care. Keep fan area clean for best and safest performance. Follow instructions for proper maintenance.
- Do not attempt to clear clogs from tool without first unplugging it.
- Do not pull or carry by cord, do not use cord as a handle, or do not pull cord around sharp edges or corners Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- To reduce the risk of electrical shock, do not expose to rain, do not use on wet surfaces. Store indoors.
- If the power supply cord is damaged, it must be replaced only by the manufacturer or by an authorized service center to avoid risk.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this power tool. If you loan someone this power tool, loan them these instructions also.

WHILE OPERATING UNIT AS A BLOWER

- Never point the blower in the direction of people or pets or in the direction of windows. Use extra caution when blowing debris near solid objects such as trees, automobiles and walls.

OTHER SAFETY WARNINGS

- Be sure to secure the unit while transporting.
- Store the unit in a dry area, locked up to prevent unauthorized use or damage, and stored in a high place out of the reach of children.
- Never douse or squirt the unit with water or any other liquid. Keep handles dry, clean and free from debris. Clean after each use. See the Cleaning and Storage instructions.
- Keep these instructions. Refer to them often and use them to instruct other users. If you loan someone this unit, also loan them these instructions.

SPECIFIC SAFETY RULES FOR BLOWER

1. WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:
   - Lead from lead-based paints
   - Crystalline silica from bricks and cement or other masonry products
   - Arsenic and chromium from chemically treated lumber

   Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)
2. WARNING: The cord of this product contains lead and/or di (2-ethylhexyl) phthalate (DEHP), chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, *et seq.*)

SAVE THESE INSTRUCTIONS

SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper inter-pretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
min	Minutes	Time
~	Alternating Current	Type of current
⎓	Direct Current	Type or a characteristic of current
	No Load Speed	Rational speed, at no load
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations
	Read The Operator's Manual	To reduce the risk of injury user must read and understand operator's manual before using this product.
	Eye Protection	Wear eye protection when operating this equipment.
	Safety Alert	Precautions that involve your safety.
	Long Hair	Failure to keep long hair away from the air inlet could result in personal injury.
	Loose Clothing	Failure to keep loose clothing from being drawn into air intake could result in personal injury.
	Keep Bystanders Away	Keep all bystanders at least 50 ft. away.
	Blower Tubes	Do not operate without tubes in place.

SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	DANGER	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

⚠ W A R N I N G

To avoid serious personal injury, do not attempt to use this product until you read thoroughly and understand completely the operator's manual. If you do not understand the warnings and instructions in the operator's manual, do not use this product. Call GREENWORKS customer service for assistance.

⚠ W A R N I N G

The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

ELECTRICAL

⚠ W A R N I N G

THIS BLOWER/VAC IS FOR OUTDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

GUIDELINES FOR USING EXTENSION CORDS

USE THE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one of heavy enough gauge to carry the current your product will draw. An undersized cord will cause overheating. The table below shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge.The smaller the gauge number, the heavier the cord.

**Ampere rating (on tool faceplate)

MINIMUM GAUGE FOR EXTENSION CORDS (AWG)

(WHEN USING 120V ONLY)

Amp Rating		Total Length of Cord in Feet (meters)			
More Than	Not More Than	25' (7.6 m)	50' (15 m)	100' (30.4 m)	150' (45.7 m)
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Recommended	

Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified technician before use. Keep extension cords away from sharp objects, excessive heat and damp or wet areas.

Use a separate electrical circuit for tools. This circuit should not be less than #12 wire and should be protected with a 15 A time delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

⚠ W A R N I N G

KEEP THE EXTENSION CORD CLEAR OF WORKING AREA. POSITION THE CORD SO THAT IT WILL NOT GET CAUGHT ON LUMBER, TOOLS OR OTHER OBSTRUCTIONS WHILE YOU ARE WORKING WITH A BLOWER/VAC. FAILURE TO DO SO CAN RESULT IN SERIOUS PERSONAL INJURY.

ELECTRICAL

⚠ W A R N I N G

CHECK EXTENSION CORDS BEFORE EACH USE. IF DAMAGED REPLACE IMMEDIATELY. NEVER USE TOOL WITH A DAMAGED CORD SINCE TOUCHING THE DAMAGED AREA COULD CAUSE ELECTRICAL SHOCK RESULTING IN SERIOUS INJURY.

ELECTRICAL CONNECTION

This tool is powered by a precision built electric motor. It should be connected to a **power supply that is 120 volts, 60 Hz, AC only (normal household current).** Do not operate this tool on direct current (DC). A substantial voltage drop will cause a loss of power and the motor will overheat. If the product does not operate when plugged into an outlet, double check the power supply.

FOR ALL DOUBLE-INSULATED APPLIANCES

Replacement Parts — When servicing use only identical replacement parts.

Polarized Appliance Connections — To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The appliance plug will fit into a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way.

KNOW YOUR BLOWER

The safe use of this product requires an understanding of the information on the tool and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules. *(See Fig. 2)*

BLOWER TUBE

The blower tube can be easily installed on the blower without any additional tools.

CORD RETAINER

A convenient cord retainer helps keep the extension cord connection secure during blower operation.

MULCHER TUBES

The mulcher tubes can be added without any additional tools to provide mulching and vacuuming functionality.

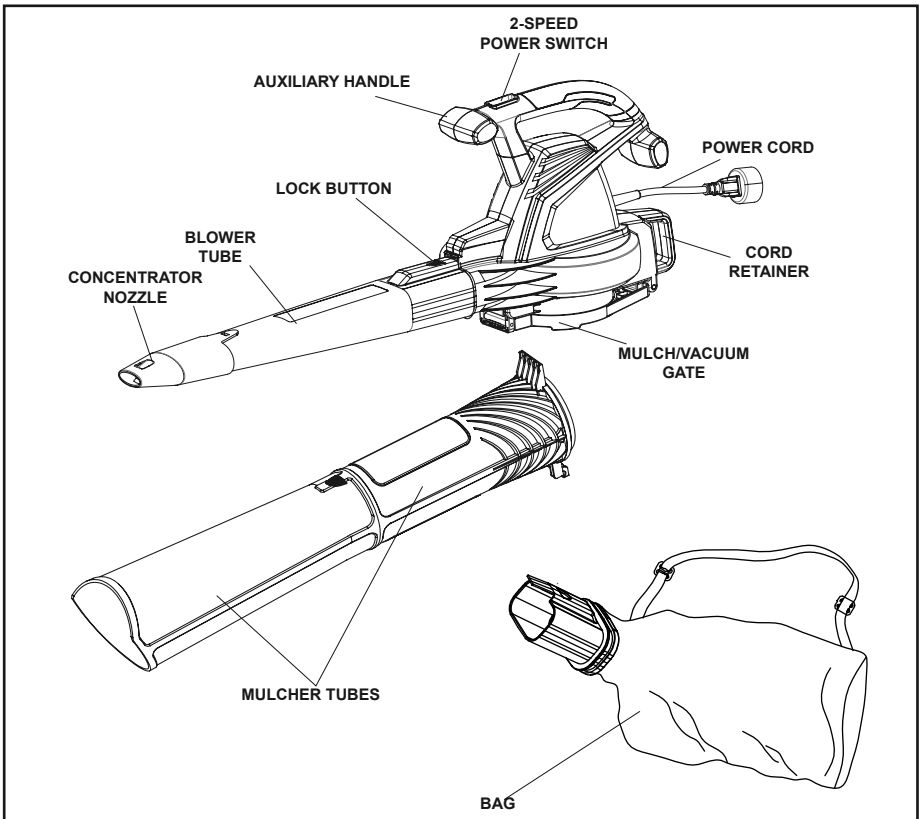


Fig. 2

ASSEMBLY

UNPACKING

• This product requires assembly.

⚠ W A R N I N G

This new product has been shipped in a partially assembled condition as described below. Carefully check the packing list below to ensure all items are included in the package; the packing list describes all loose items that are not assembled to the product as shipped. Do not operate the product if any packing list items are already assembled to your product when you unpack it. Call the customer service number below for assistance. Operation of a product that may have been improperly pre-assembled could result in serious personal injury.

• Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.

• Inspect the product carefully to make sure no breakage or damage occurred during shipping.

• Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.

• If any parts are damaged or missing, please call **1-888-866-5797** for assistance.

PACKING LIST

• Electric blower

• Blower tube

• Mulcher tubes

• Bag

• Operator's Manual

⚠ W A R N I N G

If any parts are damaged or missing do not operate this product until the parts are replaced. Failure to heed this warning could result in serious personal injury

⚠ W A R N I N G

Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

⚠ W A R N I N G

Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

ASSEMBLE AS A MULCHER *(See Fig. 3)*

1. Slide the front and rear mulcher tubes together until the lock button engages. (See fig 2)
2. Pull the lock button forward to disengage the gate. Hold the gate open. (See fig 3.1)
3. Insert the “wedged” end clip of the mulcher tube into the rear clip. (See fig 3.2). Push the “hooked” end clip of the mulcher tube into the front clip. (See fig 3.3). Press the lock button back to engage the mulcher tube. (See fig 3.4)
4. To remove mulcher tubes, follow the steps (3) (2) (1).
5. Insert the bag adaptor into the blower outlet. Lock the bag adaptor with the lock button. To remove the bag, simply press lock button and remove bag. (see Fig.5).

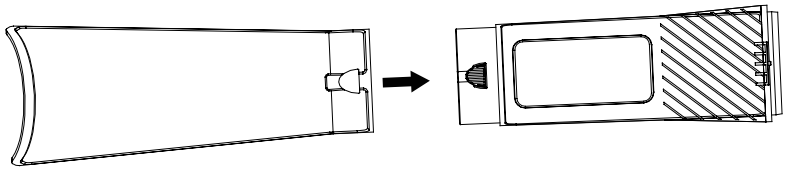
NOTE: It may be necessary to remove the blower tube or mulcher tubes to clear a blocked tube or impeller.

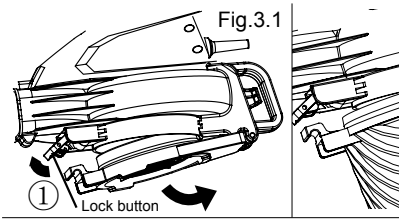
⚠ W A R N I N G

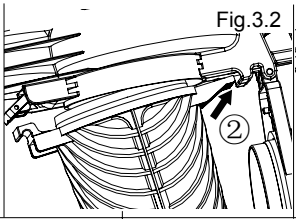
To prevent serious personal injury, make sure the switch is in the OFF position, it is unplugged, and the impellers have stopped before attaching or removing tubes.

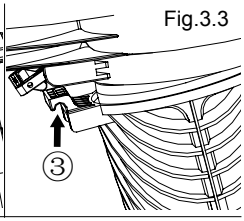
Note: Unit will not run unless Vacuum Tube latched.

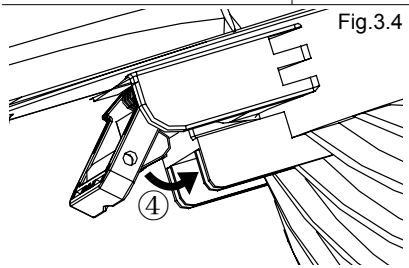
Fig.2

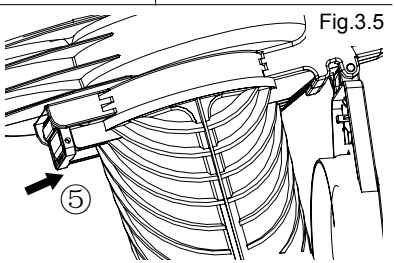










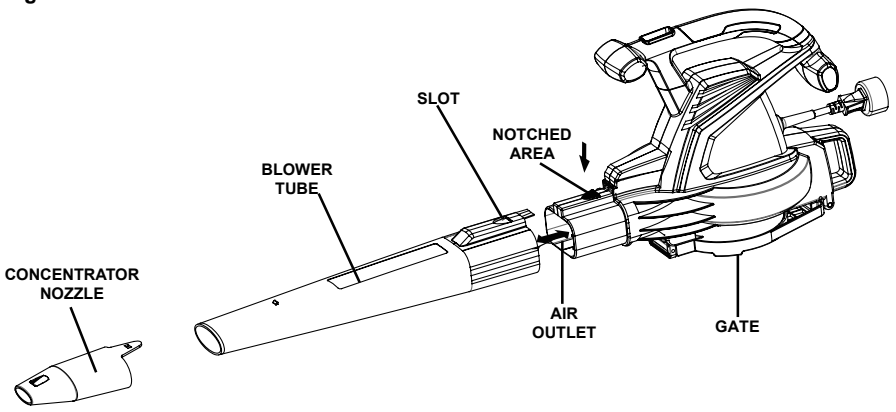


ASSEMBLE AS A BLOWER *((See Fig. 4))*

Note: Unit will not run unless Gate and Blower Tube latched.

1. Slide blower tube forward until the notched areas on the blower housing click into the slots on the tube.
2. Insert the concentrator nozzle onto the regular nozzle to lock. (Concentrator nozzle is used to increase air flow in tight areas: flower beds. under decks, etc.).

Fig. 4

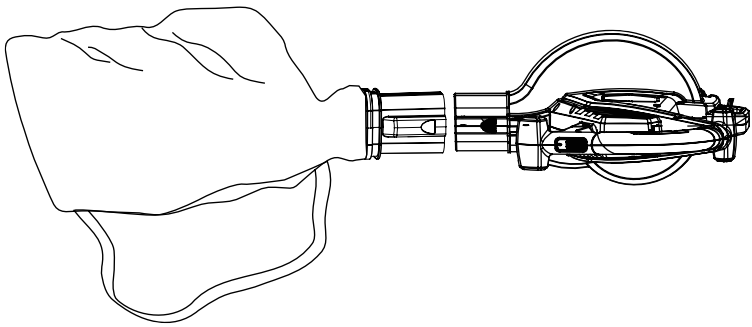


INSTALLING BAG WITH SHOULDER HARNESS *(See Fig.5)*

Note: Unit will not run unless Bag latched.

While standing in the operating position adjust the length to fit the operator's size. Pull the tab to lengthen, pull the strap to shorten.

Fig. 5

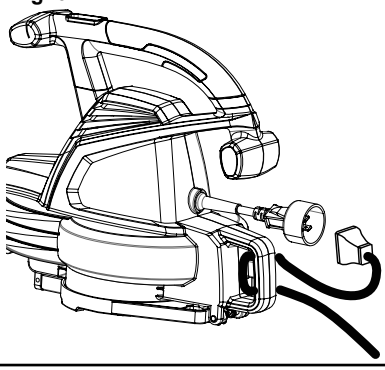


CONNECTING THE POWER CORD

(See Fig.6)

1. Secure the extension cord to the motor housing using the notch at rear of blower. This prevents accidental removal of the electrical cord.
2. Plug the female end of the electrical cord into the receptacle at the back of the unit.

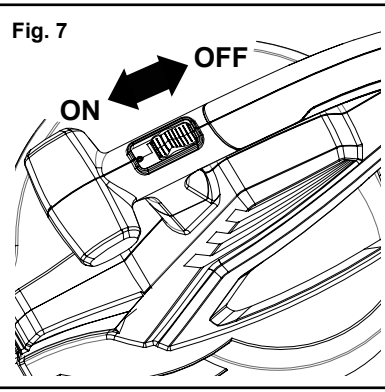
Fig. 6



STARTING/STOPPING THE BLOWER/ MULCHER *(See Fig.7)*

This unit is equipped with a three-way (OFF/ LOW/ HIGH) switch
• Slide the switch forward to the first position for LOW speeds up to 150 MPH (241Kph).
• Slide the switch forward to the second position for HIGH speeds up to 230 MPH (370Kph).
Once the unit is plugged in, stand in the operating position. Slide the power/speed switch to LOW or HIGH to start the unit. To stop the unit, slide the switch to OFF.

Fig. 7



HOLDING THE BLOWER/MULCHER

Before operating the unit, stand in the operating position. Check for the following:
• Operator is wearing proper clothing, such as boots, safety glasses or goggles, ear/hearing protection, gloves, long pants and a long sleeve shirt.

⚠ W A R N I N G

To avoid serious personal injury, wear goggles or safety glasses that comply with ANSI Z87.1at all times when operating this unit. Wear a face mask or dust mask in dusty locations.

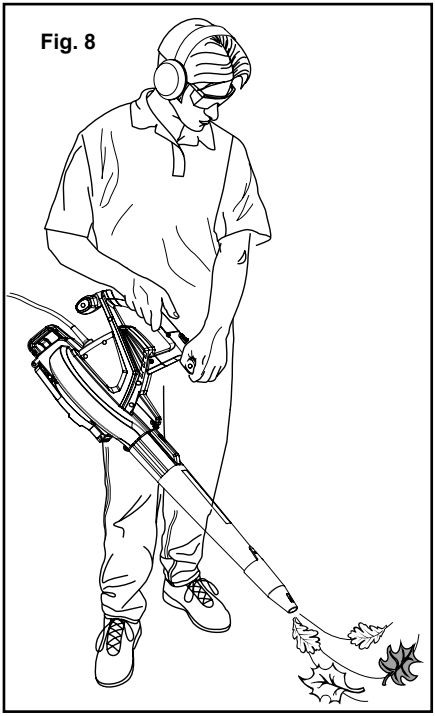
⚠ W A R N I N G

To prevent serious personal injury or damage to the unit, make sure the blower tube or the mulcher tubes and the bag are in place before operating the unit.

OPERATING TIPS *(See Fig.8)*

- The bag is installed and zipped closed (when used as a mulcher).
- Be sure the bag is zipped closed before operating the unit.
- Assure the unit is not directed at anybody or any loose debris before starting the unit.
- Verify that the unit is in good working condition. Make sure the tubes and guards are in place and secure.
- Always hold the unit with both hands when operating.
- Keep a firm grip on both the front and rear handle or grips.
- To reduce the risk of hearing loss associated with sound level(s), hearing protection is required.
- Use the shoulder strap when using unit as a mulcher.
- Operate power equipment only at reasonable hours—not early in the morning or late at night when people might be disturbed. Comply with times listed in local ordinances. Usual recommendations are 9:00 am to 5:00 pm, Monday through Saturday.
- To reduce noise levels, limit the number of pieces of equipment used at any one time.
- To reduce noise levels, operate power blowers at the lowest possible speed to do the job.
- Use rakes and brooms to loosen debris before blowing.
- In dusty conditions, slightly dampen surfaces.
- Conserve water by using power blowers instead of hoses for many lawn and garden applications, including areas such as gutters, screens, patios, grills, porches, and gardens.
- Watch out for children, pets, open windows or freshly washed cars, and blow debris safely away.
- Clean up after using blowers and other equipment. Dispose of debris appropriately.

Fig. 8



NOTE: Please ensure that the Mulch/Vacuum Gate is completely closed and locked.

OPERATION

AIR VENTS

Never cover air vents. Keep them free from obstructions and debris. They must always remain clear for proper motor cooling.

⚠ W A R N I N G

To avoid serious personal injury, do not wear loose fitting clothing or articles such as scarves, strings, chains, ties, etc., that could get drawn into the air vents. To make sure long hair does not get drawn into the air vents, tie back long hair.

OPERATING AS A BLOWER

Note: Unit will not run unless Gate and Blower Tube latched.

Hold the blower firmly. Sweep from side to side with the nozzle several inches above the ground or floor. Slowly advance the unit, keeping the accumulated pile of debris in front of you. Most dry blowing operations are better suited to low speeds, rather than high. High speed blowing is a better way to move heavier items like large debris or gravel.

OPERATING AS A MULCHER

Note: Unit will not run unless Bag and Vacuum Tube latched.

Hold the vac firmly, tilting the mulcher tubes (2-4 in. or 5-10 cm), and use a sweeping action to collect light debris. The debris will flow into the bag. Items such as small leaves and twigs will be mulched as they pass through the fan housing. For longer bag life and increased performance, empty the bag often.

CLEARING A BLOCKED TUBE / IMPELLER

⚠ W A R N I N G

To avoid serious personal injury, be sure the unit is OFF and unplugged before clearing the impeller.

⚠ W A R N I N G

To avoid serious personal injury, always wear gloves to protect yourself from the impeller blades or other sharp objects.

1. Slide the Power/Speed switch down to the OFF position until the unit comes to a complete stop.
2. Unplug the unit.
3. Remove the blower tube or mulcher tubes and the bag.
4. Carefully remove material blocking the tube or impeller. Inspect the blades to ensure no damage has occurred. Rotate the impeller blades by hand to ensure the blockage is completely cleared.
5. Reinstall the blower tube or mulcher tubes and the bag.
6. Plug the unit back into the power supply.

MAINTENANCE

SERVICING DOUBLE-INSULATED UNITS

This unit is double insulated. In a double-insulated unit, two systems of insulation are provided instead of grounding. There is no grounding provided and no means of grounding should be added to this unit. Extreme care and knowledge of the system is required when servicing a double-insulated unit. Service should be performed by qualified service personnel only. Replacement parts for a double-insulated unit must be identical to the parts they replace. Refer any repairs to an authorized service dealer. A double-insulated unit is marked with the words "double insulation" or " "

CLEANING THE UNIT

⚠ W A R N I N G

To avoid serious personal injury, always turn the unit off and unplug it before cleaning or servicing. Use a small brush to clean off the outside of the unit. Do not use strong detergents, household cleaners that contain aromatic oils such as pine and lemon, and solvents such as kerosene as they can damage plastic housings or handles. Wipe off any moisture with a soft, dry cloth.

CLEANING THE BAG

1. Empty the bag after each use to avoid deterioration and obstructing air flow, which will reduce the performance of the mulcher.
2. Wearing eye protection and a dust mask, clean the bag as needed. Turn the bag inside out after initial emptying and vigorously shake out dust and debris.
3. Wash the bag once a year, or more often if needed:
    a. Remove the bag.
    b. Turn bag inside out.
    c. Hang it up.
    d. Hose it down thoroughly.
    e. Leave it hanging to dry.
    f. Turn bag right-side out and reinstall.

STORAGE

- Store the unit locked up to prevent unauthorized use or damage.
- Store the unit in a dry, well-ventilated area.
- Store the unit out of the reach of children

INSPECT EXTENSION CORDS

Inspect all extension cords periodically. Look closely for deterioration, cuts or cracks in the insulation. Inspect the connectors for damage. Replace cords if defective or damaged.

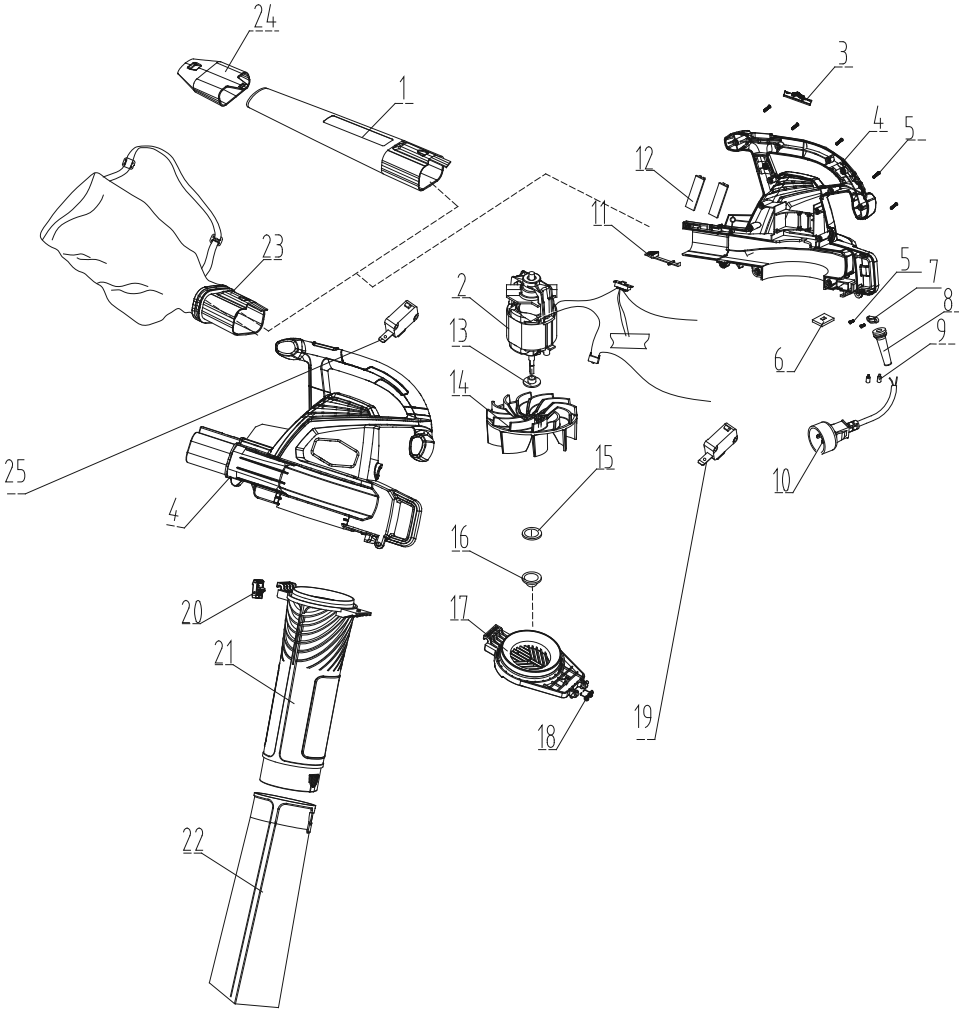
TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Unit will not blow or mulcher.	1. Bag full	1. Empty the bag.
	2. Blocked tube	2. Clear the blockage.
	3. Blocked impeller	3. Clear the blockage
	4. Dirty bag	4. Clean the bag.
	5. Torn bag	5. Replace the bag.
	6. Bag unzipped	6. Zip up the bag.
	7. Unit unplugged	7. Plug into an outlet or an extension cord.
Unit will not start.	1. Unit is unplugged.	1. Check cord to make sure it is plugged into an electrical outlet.
	2. Power/speed switch is in the OFF position.	2. Slide switch to high or low.
	3. Defective power switch.	3. Call techincal support: 1-888-866-5797
	4. Vac tubes are not correctly installed.	4. Check vac tubes to ensure that they are allowing the switch to be engaged when correctly installed.
	5. Intake gate/cover is not closed.	5. Ensure that gate/cover is fully closed and locked.
	6. Blower tube or bag assembly not correctly installed.	6. Check blower tube or bag assembly to ensure that they are allowing the switch to be engaged when correctly installed.
	7. House circuit may have tripped.	7. Check wall circuit breaker panel and reset if necessary.

PARTS LIST

Series Number	Item number	Descritption	QTY
1	34105810	blower tube	1
2	361011418-1	motor assay	1
3	34105148	switch push plate	1
4	31103148/31102148	housing assy	1
5	3220313	screw	19
6	34901148	dustproof sponge	1
7	3410801	cord clip	1
8	3420102-1	strain releif cover	1
9	3650339	terminal	2
10	36409142	power line with water-proof plug	1
11	3410679-9	lock button for blower tube	1
12	3420311	rubber washer	4
13	3320128	shaft sleeve	1
14	34112142	impeller	1
15	3340427	lock washer	1
16	3410127-1	turn cap	1
17	34105142	mulcher cover	1
18	33401142	tension spring	1
19	36301142	micro switch	1
20	34108142/34109142	lock button assay	1
21	34106142	upper mulcher tube	1
22	34107142	lower mulcher tube	1
23	34113142A	bag assay	1
24	34115142	concentrator nozzle	1
25	36301154	micro -switch	1

EXPLODED VIEW



NOTES

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS DOCUMENT AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

PORTLAND™

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